

OS9
1/09

OIPE

#2

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/974,712

DATE: 10/29/2001
TIME: 15:40:30

Input Set : A:\LEX-0251-USA SEQLIST.txt
Output Set: N:\CRF3\10292001\I974712.raw

4 <110> APPLICANT: Friddle, Carl Johan
 5 Hilbun, Erin
 6 Gerhardt, Brenda
 7 Turner, C. Alexander Jr.
 9 <120> TITLE OF INVENTION: Novel Human Ion Channel Protein and Polynucleotides Encoding
 the Same
 11 <130> FILE REFERENCE: LEX-0251-USA
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/974,712
 C--> 13 <141> CURRENT FILING DATE: 2001-10-10
 13 <150> PRIOR APPLICATION NUMBER: US 60/239,623
 14 <151> PRIOR FILING DATE: 2000-10-10
 16 <160> NUMBER OF SEQ ID NOS: 3
 18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 1371
 22 <212> TYPE: DNA
 23 <213> ORGANISM: homo sapiens
 25 <400> SEQUENCE: 1
 26 atggagccgc ggtgcccgcc gcgcgtgcggc tgctgcgagc ggctgggtgct caacgtggcc 60
 27 gggctgcgt tcgagacgcg ggccgcgcacg ctggccgct tcccgacac tctgcttaggg 120
 28 gaccgcgcgc gcccgcggccg cttctacgac gacgcgcgcgc gcgagtttattt ttgcacccgg 180
 29 cacccggccca gcttcgacgc cgtgctctac tactaccgt ccgggtggccg gctgcggccg 240
 30 ccggcgcacg tgccgctcga cgtcttcctg gaagagggtgg ccttctacgg gctggccgcg 300
 31 gccccctgg cacgcctgcg cgaggacgag ggctgcggccg tgccgccccga gcgcggccctg 360
 32 ccccgccgcg ctttcgcggc ccagctgtgg ctgctttcg agtttcccgag gagctctcag 420
 33 gccgcgcgcg tgctgcgcgt agtctccgtg ctggatcatcc tcgtctccat cgtcgcttc 480
 34 tgcctcgaga cgctgcctga cttccgcgcac gaccgcgcacg gcacggggct tgctgtcga 540
 35 gccgcagccg gcccgttccc cgctcggtcg aatggctcca gccaaatgcc tggaaatcca 600
 36 ccccgccctgc cttcaatga cccgttcttc gtggtgagaa cgctgtgtat ttgttggttc 660
 37 tccttgagc tgctggtaacg cctcctggc tgtccaagca aggctatctt cttcaagaac 720
 38 gtatgtacc tcatcgattt tgtggctato cttccctact ttgtggcact gggcaccgag 780
 39 ctggcccgcc agcgagggtt gggccagcag gccatgtcac tgccatccct gagagtcatc 840
 40 cgattgggtgc gtgtcttccg catttcaag ctgtccggc actcaaaggg cctgcaaatc 900
 41 ttggccaga cgcttcgggc ctccatgcgt gagctggcc tcctcatctt ttcccttc 960
 42 atcggtgtgg tcctctttc cagcgccgtc tactttccg aatggaccg ggtggactcc 1020
 43 catttcacta gcatccctga gtccattctgg tggccgttag tcaccatgac tacagttggc 1080
 44 tatggagaca tggcacccgt cactgtgggt ggcaagatag tgggtctct gtgtgccatt 1140
 45 gcgggcgtgc tgactatttc cctgcccagtgc cccgtcattt totccaattt cagctacttt 1200
 46 tatcaccggg agacagaggg cgaagaggct gggatgtca gccatgtggc catgcagcc 1260
 47 tggccac tggagggcaa ggccaatggg gggctgggtgg acggggaggt acctgagcta 1320
 48 ccacctccac tctggcacc cccaggaaa cacctggta cogaagtgtg a 1371
 50 <210> SEQ ID NO: 2
 51 <211> LENGTH: 456
 52 <212> TYPE: PRT
 53 <213> ORGANISM: homo sapiens
 55 <400> SEQUENCE: 2
 56 Met Glu Pro Arg Cys Pro Pro Cys Gly Cys Cys Glu Arg Leu Val
 57 1 5 10 15

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/974,712

DATE: 10/29/2001
TIME: 15:40:30

Input Set : A:\LEX-0251-USA SEQLIST.txt
Output Set: N:\CRF3\10292001\I974712.raw

58 Leu Asn Val Ala Gly Leu Arg Phe Glu Thr Arg Ala Arg Thr Leu Gly
 59 20 25 30
 60 Arg Phe Pro Asp Thr Leu Leu Gly Asp Pro Ala Arg Arg Gly Arg Phe
 61 35 40 45
 62 Tyr Asp Asp Ala Arg Arg Glu Tyr Phe Asp Arg His Arg Pro Ser
 63 50 55 60
 64 Phe Asp Ala Val Leu Tyr Tyr Gln Ser Gly Gly Arg Leu Arg Arg
 65 65 70 75 80
 66 Pro Ala His Val Pro Leu Asp Val Phe Leu Glu Glu Val Ala Phe Tyr
 67 85 90 95
 68 Gly Leu Gly Ala Ala Ala Leu Ala Arg Leu Arg Glu Asp Glu Gly Cys
 69 100 105 110
 70 Pro Val Pro Pro Glu Arg Pro Leu Pro Arg Arg Ala Phe Ala Arg Gln
 71 115 120 125
 72 Leu Trp Leu Leu Phe Glu Phe Pro Glu Ser Ser Gln Ala Ala Arg Val
 73 130 135 140
 74 Leu Ala Val Val Ser Val Leu Val Ile Leu Val Ser Ile Val Val Phe
 75 145 150 155 160
 76 Cys Leu Glu Thr Leu Pro Asp Phe Arg Asp Asp Arg Asp Gly Thr Gly
 77 165 170 175
 78 Leu Ala Ala Ala Ala Ala Gly Pro Phe Pro Ala Arg Leu Asn Gly
 79 180 185 190
 80 Ser Ser Gln Met Pro Gly Asn Pro Pro Arg Leu Pro Phe Asn Asp Pro
 81 195 200 205
 82 Phe Phe Val Val Glu Thr Leu Cys Ile Cys Trp Phe Ser Phe Glu Leu
 83 210 215 220
 84 Leu Val Arg Leu Leu Val Cys Pro Ser Lys Ala Ile Phe Phe Lys Asn
 85 225 230 235 240
 86 Val Met Asn Leu Ile Asp Phe Val Ala Ile Leu Pro Tyr Phe Val Ala
 87 245 250 255
 88 Leu Gly Thr Glu Leu Ala Arg Gln Arg Gly Val Gly Gln Gln Ala Met
 89 260 265 270
 90 Ser Leu Ala Ile Leu Arg Val Ile Arg Leu Val Arg Val Phe Arg Ile
 91 275 280 285
 92 Phe Lys Leu Ser Arg His Ser Lys Gly Leu Gln Ile Leu Gly Gln Thr
 93 290 295 300
 94 Leu Arg Ala Ser Met Arg Glu Leu Gly Leu Leu Ile Phe Phe Leu Phe
 95 305 310 315 320
 96 Ile Gly Val Val Leu Phe Ser Ser Ala Val Tyr Phe Ala Glu Val Asp
 97 325 330 335
 98 Arg Val Asp Ser His Phe Thr Ser Ile Pro Glu Ser Phe Trp Trp Ala
 99 340 345 350
 100 Val Val Thr Met Thr Thr Val Gly Tyr Gly Asp Met Ala Pro Val Thr
 101 355 360 365
 102 Val Gly Gly Lys Ile Val Gly Ser Leu Cys Ala Ile Ala Gly Val Leu
 103 370 375 380
 104 Thr Ile Ser Leu Pro Val Pro Val Ile Val Ser Asn Phe Ser Tyr Phe
 105 385 390 395 400
 106 Tyr His Arg Glu Thr Glu Gly Glu Ala Gly Met Phe Ser His Val

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/974,712

DATE: 10/29/2001
TIME: 15:40:30

Input Set : A:\LEX-0251-USA SEQLIST.txt
Output Set: N:\CRF3\10292001\I974712.raw

107 405 410 415
 108 Asp Met Gln Pro Cys Gly Pro Leu Glu Gly Lys Ala Asn Gly Gly Leu
 109 420 425 430
 110 Val Asp Gly Glu Val Pro Glu Leu Pro Pro Pro Leu Trp Ala Pro Pro
 111 435 440 445
 112 Gly Lys His Leu Val Thr Glu Val
 113 450 455
 115 <210> SEQ ID NO: 3
 116 <211> LENGTH: 1792
 117 <212> TYPE: DNA
 118 <213> ORGANISM: homo sapiens
 120 <400> SEQUENCE: 3
 121 cgccggcgcc cgaggcggccc gaggcggggc cgacccgggg cggggcgctcg gggccacacg 60
 122 tcgggtcgcg ggtcgccggg gtcgcgcgcg ccatggagcc gcggtgcccgg ccgcgcgtcg 120
 123 gctgctgcga gccccggggc ctcAACgtgg cccggctgcgc ctgcagacg cggggcgccca 180
 124 cgctggcccg cttcccgac actctgttag gggaccacgc ggcgcgcgcgc cgcttctacg 240
 125 acgacgcgcg ccgcgagat ttcttcgacc ggcacccggcc cagcttcgac gccgtgtct 300
 126 actactacca gtccgggtggg cggctgcggc ggccggcgca cgtgccgcgc gacgttcc 360
 127 tggaaagaggt ggccttctac gggctggggc cggcggccct ggcacgcctg cgcgaggacg 420
 128 agggctgccc ggtgcgcgcgc gagegcgcgcgc tgcccccggc cgccttcgccc cgccagctgt 480
 129 ggctgtttt ctagtttccc gagagctctc aggccgcgcgc cgtgtctgcgc gtatgtccg 540
 130 tgctggtcat cctcgcttc atcgtcgtat tctgcctcga gacgctgcct gacttccgcg 600
 131 acgaccgcga cggcacgggg cttgtctgc cagcgcgcgc cggccgcgttc cccgctcgcc 660
 132 tgaatggctc cagccaaatg cttggaaatc caccggcgctt gccttcaat gaccgttct 720
 133 tcgtggtgga gacgctgtgt atttgggtt tctcccttga gtcgtggta cgcctccctgg 780
 134 tctgtccaag caaggctata ttcttcaaga acgtatgaa cctcatcgat ttttgtggta 840
 135 tccttcccta ctttgtggca ctgggcaccc agctggcccg gcagcgagggg gtggggccacg 900
 136 aggccatgtc actggccatc ctgagagtca tccgattggt gcgtgtcttc cgcatcttca 960
 137 agctgtcccg gcactcaaag ggcctgcaaa tcttgggcca gacgcttcgg gcctccatgc 1020
 138 gtgagctggg cttcctcata tttttctct tcatacggtgt gtcctctt tccagcgccg 1080
 139 tctactttgc cgaagttgac cgggtggact cccatttcac tagcatccct gagtccttct 1140
 140 ggtggccggg agtcaccatg actacagttg gctatggaga catggcaccc gtcactgtgg 1200
 141 gtggcaagat agtgggtctt ctgtgtgcac ttgcggcggt gtcgtactatt tccctgccag 1260
 142 tgccccgtcat tgtctccaat ttcaagtcact tttatccaccc ggagacagag ggcgaagagg 1320
 143 ctggggatgtt cagccatgtc gacatgcgc cttgtggccc actggaggcc aaggccaaatg 1380
 144 gggggctggg ggacggggag gtacctgagc taccacccctt actctggccca ccccccaggaa 1440
 145 aacacctggg caccgaagtg tgaggaacag ttgaggtctg caggacctca caccccttca 1500
 146 gagggagggg gggaggccag ggtggaggcc aaggctgggg ggaggggatt ggggttagga 1560
 147 agagcttaggt taagtcrtaa cgagtggggaa aacactgagt ttgttgggt cttgggttgt 1620
 148 gtggtttggg agtcctgtc ggtacctctt gaagcagcag cgaatggcaa tgggttgtgt 1680
 149 tgggttaatg aagactcaat tggttcatat tactctgagt tggcaaaagc tcatggagcc 1740
 150 ttttgggtta attttagagat aggtttggatc rtatcatttt tggatgtttcc ta 1792

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/974,712

DATE: 10/29/2001

TIME: 15:40:31

Input Set : A:\LEX-0251-USA SEQLIST.txt

Output Set: N:\CRF3\10292001\I974712.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date